

REMARKS

Applicant respectfully requests reconsideration of the prior art rejections set forth by the Examiner under 35 USC-sections 102 and 103. Applicant respectfully submits that the prior art references of record, whether considered alone, or in combination, fail to either teach or suggest Applicant's presently claimed invention.

In order to underscore the differences between Applicants presently claimed invention and the prior art references cited by the Examiner, Applicant has modified each of the independent claims to further require that the plurality of transfer registers include two transfer registers which receive and concurrently transfer said signal charges from at least two rows of pixels of said sensor array. Applicant respectfully submits that none of the references of record teach or suggest this advance in the art and furthermore that the cited references actually teach away from Applicants presently claimed invention.

More specifically, Applicant notes that United States patent number 5,196,939 only describes an imaging device wherein transfer registers receive charges from only a single row of a sensor array. Furthermore, Applicant respectfully submits that Applicant's claimed imaging device is not obvious in light of the teachings of the prior art because the prior art reference clearly describes that the charges from only a single row of pixels are transferred into the two registers and that charge-transfer is performed with the adjacent four electrodes of the transfer registers having a charge packet and the other adjacent four electrodes blank as shown in Figures 6A-6 F and 8.

In particular, Figure 8 details the charge transfer scheme which is described in Column 7 beginning at line 19. This portion of the specification notes that at these sites and charge packets are shown in every other location.

More specifically, in the detailed description relating to the subject matter of Figure 4, it is readily apparent that the Examiner's primary reference teaches that each row is divided into the two transfer registers. For example, in the description in column 4 beginning at line 42 states that each row of data transferred from storage register 33 to transfer registers 17 A and 17B is divided up between the two transfer registers 17 A and 17B. Transfer register 17 A receives the charge stored in the even-numbered columns of the transferred row while transfer register 17 B receives charge stored in the odd-numbered columns of the transferred row. This portion of the specification makes it particularly clear that the Examiner's primary reference teaches away from Applicants presently claimed invention.

Appl. No. 09/447,301
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Reply to Office Action of December 21, 2004

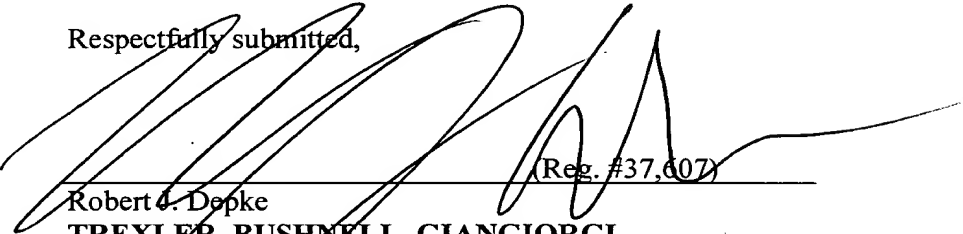
In light of the foregoing, Applicant respectfully submits that all claims now stand in condition for allowance.

The Director is hereby authorized to charge any fees which may be required, or credit any overpayment, to Deposit Account Number 20-1495.

Date: _____

4/20/05

Respectfully submitted,



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